

CHAPTER III

RESEARCH METHOD

This chapter covers the explanation of the research design, site and participation of the research, research procedure, data collection technique, and data analysis of the research.

3.1 Research Design

Regarding the research question and the aims of the study that are provided in the chapter one, research design in the present study is qualitative case study. According to Creswell (2012) one of the characteristics of qualitative research relies on the exploration of the problem and the development of a detailed understanding of a central phenomenon. In regard to the research question, the central phenomenon is the student behavioral and cognitive engagement when the students work with digital storytelling project.

Furthermore, case study is chosen to answer the research question, which needs to explore more about how the students engage in learning behaviorally and cognitively. Alwasilah (2015) states for the small scale research, case study is considered appropriate to deepen understanding and focus on one particular research topic. He further explains that case study employ various source of data that is known as triangulation, that can be gathered from the observation, interview, and many more. Therefore, this research collects data from observation, interview, and document analysis that will be elaborated later.

3.2 Site and Participants

This research was conducted in one of senior high schools in Bandung. The participants were 36 students from tenth grade. The students in this level were considered that they needed to be prepared to face the real condition earlier and their motivation needed to be strengthened to get the sense of learning English, since they were in the transition from SMP to SMA. This notion was supported by Nguyen, Cannata, and Miller (2016) that “tenth-grade students were chosen because...value-added measures come from ninth- and 10th-grade students, and 10th-grade students could tell us more about their high school experience due to their longer amount of time in the school” (p. 5) besides this research was considering the syllabus and the suitability of the text type for digital storytelling was taught in the tenth grade.

3.3 Research Procedure

In obtaining the data and answering research question, this research involved two steps; preparation and application of creating digital storytelling process, which were elaborated below:

3.3.1 Preparation

Before implementing the process of creating digital storytelling, there were several preparations. Those were developing lesson plan, selecting digital storytelling video, and developing student engagement indicators.

First, the lesson plan was developed for three meetings. It was focused on the implementation of digital storytelling process that was overlapping PBL steps, as explained in the chapter 2. The following table is a summary of lesson plan.

Table 3.1 Summary of Lesson Plan

Lesson Plan	Objectives	Activities
Lesson Plan 1	<ul style="list-style-type: none">• Students are able to identify the structure of text and language features of recount text in the video.• Students are able to retrieve the information from the video.	<ul style="list-style-type: none">• Teacher introduces the example of digital storytelling project by showing the video from YouTube in BENI channel entitled “Finding Nenek”• Teacher provides the worksheet contains eight questions to check students’ comprehension.• Together with the teacher, students discuss about their answers.
Lesson Plan 2	<ul style="list-style-type: none">• Students are able to draft their story for digital storytelling project.• Students are able to visualize their stories by drawing the planned scenes into the storyboard.	<ul style="list-style-type: none">• Students are given the example of making sentence for recount text.• Students start to make the draft with the group and make the storyboard to aid them in drafting their story.• Students utilize their gadget to look for the information for their digital storytelling.
Lesson Plan 3	<ul style="list-style-type: none">• Students are able to present their digital storytelling project.	<ul style="list-style-type: none">• Students present their digital storytelling one by one.• Students get some comments or suggestions from their

Second, related to the first step selecting digital storytelling project video for the material. It was aimed to make the students familiar with the types of digital storytelling. There were several criteria in this study; it should contain the linguistics feature that was learned in the syllabus, the language was understandable by the students, and the digital storytelling video contained the topic that was going to be used in the classroom, which was preserving culture.

Third, the indicator for analyzing students' behavioral and cognitive engagement used Nguyen, Cannata, and Miller (2016) for behavioral engagement and Greene (2015) and Husiana (2018; cited from Lambert, Philp, and Nakamura (2016) , and Husiana (2018), as follow:

Table 3. 2 Summary of the Engagement Dimension as the Analysis Tool

Dimension	Indicators	
Behavioral Engagement	Active student engagement:	Passive student engagement:
	<ul style="list-style-type: none"> • students ask question during teaching and learning process, • students respond to teacher's question or the other students, • students volunteer themselves the information to the classroom, • students have the opportunities to share ideas with classroom, • students manipulate the materials. 	<ul style="list-style-type: none"> • students act listening but not responding to question, • not asking question, and being involved but appearing disinterested in the assigned task.
Cognitive Engagement	Adopted from: Nguyen, Cannata, and Miller (2016)	
	The active use of prior knowledge and the intentional creation of more complex knowledge structures by integrating the information with the prior knowledge (Greene, 2015; p. 15).	
	The number of clauses which served to expand on semantic content; suggestions, elaboration, reasons, and opinions Students produce the phrase "I think..." and causal connectives such as "because".	
	Adopted from: (Husiana, 2018; Lambert, Philp, & Nakamura, 2016)	

The indicators of students' behavioral were adopted Nguyen, Cannata, and Miller (2016) which was categorized into students' active behavioral engagement and passive behavioral engagement which already used to see Student behavioral engagement in high school. The

cognitive engagement used two indicators from Greene (2015) and Husiana (2018) and Lambert, Philp, and Nakamura (2016) which is considered interchangeable.

3.3.2 Implementation of Digital Storytelling Process

Since this study adapted the steps of digital storytelling that was modified to be compatible as pedagogical tool, there were several steps that were proposed by Jakes (2006; Miller (2009) cited in Umayah, 2017) and additional step explained as follow:

- a. The student were introduced to the text that were going to use. That was recount text, began with the social funtion text, generic structure, and language features. After that, the researcher introduced one of example of digital storytelling, which related with the topic that would be made by the students that is preserving the culture and explained the procedure. In this stage, the researcher divided the classroom into six groups, and the leader of the group was the one who was high achiever and/ or could edit the video. Each of them were having a chance to choose their own members.
- b. Then, the students brainstormed and wrote down the idea on the selection topics. The students were asked to brainstrom the idea of their digigital storytelling project using the guided question “As Indonesian who grew up in Lembang which is the tourist destination, what can you do to preserve your culture?”.
- c. Third, the students made the draft and draw storyboard/story map based on the draft, it is aimed to start visualizing the story that will be shown and select the suitable media to combine all of the elements in digital storytelling. In this stage, the researcher gave the students feedback to the draft, and the student were able to ask question to the teacher.
- d. Next step is the production of digital storytelling. The process is integrated the multimedia layers, such as voice, images, or music, through installed the software or application in the computer. The students started to shoot their story, and edit the video into the digital storytelling project.
- e. Lastly, the students showed their digital storytelling projects in front of the classroom. In this stage, the teacher evaluate the product, and the students could give the comments and suggestion to the other groups.

To evaluate the students' digital storytelling process, this research used the digital storytelling rubric adapting Brenner (2014; p. 29) which has been implemented in a class of English language students, as follow:

Table 3. 3 Digital Story Evaluation Sheet

Use these ratings and rubrics to evaluate a digital story project.					
E = Excellent, VG = Very Good, G = Good, F = Fair					
Digital Media Components		E	VG	G	F
Narrative	Depth of content				
Still photograph	Image coordination				
Audio soundtrack	Appropriateness				
Voiceover	Clarity				
Digital Media Production		E	VG	G	F
Creativity	Design				
Flow of narrative	Coordination of stills and narrative.				
Organization	Continuity				
Technical success and use of equipment and software	Level of professionalism				
Final Presentation		E	VG	G	F
Presence	Style				
Preparation	Organization				
Eye Contact	Body Language				

Adapted from: (Brenner, 2014)

3.4 Data Collection Technique

To help the researcher answering the research question, the data ideally employs techniques in regard to qualitative case study characteristics; those are classroom observation, interview, and document analysis that will be elaborated below:

3.4.1 Classroom Observation

Observation was one of the data collection techniques in qualitative research. It allowed the researcher to observe a real condition in the classroom (Alwasilah, 2012). In this research, the data were collected by conducting participant-observation. According to Cohen, Manion, and Morrison (2007) this observation allowed the researcher to remain with

the participants in the classroom. They also stated the participant-observation is useful for researcher who needs to involve in the situation to better know about behavior. Thus, the researcher took part as the teacher in the classroom, to get clear insight regarding how the students could be engaged through digital storytelling in learning English.

Classroom observation was recorded in the form of video along the teaching and learning processes. It helped the researcher to capture the activity, behavior, and interaction of student-teacher, student-peer, and student-content during the process of creating digital story in the classroom. In addition, observation sheet was used to make the researcher having a control to the classroom and describing the real situation. Since this study adapted the steps of digital storytelling as explained in the chapter two, the observation was conducted for three meetings. The students were given the responsibility to have a role in the process making digital story. The roles were content creator, video editor, discussion director, and narrator. Those roles helped the researcher to identify the students, besides the discussion director could be involved to help capturing the process of each discussion group, which probably missed by the researcher. Besides that, the researcher used the media *WhatsApp* group with the some of students from each group in order to monitor the students' work and report.

3.4.2 Interview

The interview was conducted before and after the observation. The multiple interviews were chosen in order to strengthen the observation class result. This was aimed to gain the deeper information in which the students engage in the classroom activity and task while working with their digital stories. The interview was involved six students for the first and second interview, which were choosen based on their achievement in the classroom and capabilities in editing the video. It was recorded to make the data always accessible and it was transcribed to clearly understand the information.

The first interview wanted to examine the students' prior knowledge regarding digital storytelling. It was conducted before the students were given the exposure to digital storytelling project. The second interview was conducted after classroom observation. In this

interview the questions focused on the process of making the digital storytelling gearing toward the students' behavioral and cognitive engagement.

3.4.3 Documents Analysis

The documents that were employed are product of students' digital students' self-reflection, students' digital storytelling, and lesson plan. The students' digital storytelling products were exhibited in the last meeting. As one of the task completion, the digital storytelling products were assessed by the teacher.

In order to get the data of student engagement in the process of learning, lesson plan needed to be involved. The lesson plan led the researcher to check either the students followed the instruction and content or being disengaged along the process. In addition, it contained the steps that should be analyzed to evaluate and support the observation data.

Furthermore, the reason including students' self-reflection was to help answer the research question. Alwasilah (2015) states documents can be gathered from many sources, one of them is diary or personal journal, and therefore, students' self-reflection was chosen. Through the self-reflection, the students could express their thought along the process of creating digital storytelling aided by guided questions.

3.5 Data Analysis

3.5.1 Classroom Observation

The data from classroom observation was the video and observation sheet. The analysis focused on answering research question that how digital storytelling can engage the student in the classroom. Therefore, the exposure was given more to the students' behavior and cognitive when they are in the process of making digital storytelling from the first meeting until the last meeting. The observation sheet was analyzed, in several points, mainly for the students' response toward the teacher action and questions, students' interaction with their peers, also students' interaction with the assigned task. The participant was named using the letter 'S' which stood for students and number from 1 to 36 based on their list of the names.

3.5.2 Interview

As the data collection in interview was audio recording, it was transcribed in order to get the clear information and points from the interview. In accordance with research question, the analysis of interview focused on answering student behavioral and cognitive engagement in using digital storytelling to engage them in English learning classroom. From the interview, the students' transcription was coded to distinguish the student behavioral engagement and cognitive engagement.

3.5.3 Documents Analysis

In the documents analysis, the data were students' self-reflection, storytelling and lesson plan. The students' self-reflection writing was analyzed based on the given question that indicated student behavioral engagement and cognitive engagement. The students' digital storytelling product was analyzed using the rubric for the digital storytelling that was fitted in measuring student engagement. The rubric helped the researcher to find out whether the students engage in the learning; when the st

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Lesson Plan 2	<ul style="list-style-type: none"> Students are able to draft their story for digital storytelling project. Students are able to visualize their stories by drawing the planned scenes into the storyboard. 	<ul style="list-style-type: none"> Students are given the example of making sentence for recount text. Students start to make the draft with the group and make the storyboard to aid them in drafting their story. Students utilize their gadget to look for the information for their digital storytelling.
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